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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,932	09/29/2003	Teck Hu	17	1634
23720 7590 06/01/2009 WILLIAMS, MORGAN & AMERSON 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			EXAMINER NGUYEN, KHAI MINH	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 06/01/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/673,932	Applicant(s) HU, TECK	
	Examiner KHAI M. NGUYEN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claims 7-13 have been considered but are moot in view of the new ground(s) of rejection.
2. The indicated allowability of claims 7-13 is withdrawn in view of the newly discovered reference(s) to rejected. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over ETSI TS 122 146 V.5.2.0 (2002-2003), in view of Paratainen et al. (U.S.Pub-20030174645), in view of Trossen et al. (U.S.Pub-20040176103), and further in view of Khan et al. (U.S.Pat-6400954).

Regarding claim 1, ETSI teaches a method of wireless communication with a number of subscribers to a subscription-based service (fig.2, pages 7-8, section 4.2), the method comprising:

determining the number of subscription-based service subscribers within a cell (home environment) (section 3.1 (multicast area), section 4.2 (pg.8, 4.2.1), multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising);

determining at least one of a geographical distribution of a number of multicast service subscribers (section 3.1 (multicast area)) and a subscription distribution of the number of multicast service subscribers within the cell (home environment) (fig.2, pg. 8, section 4.2.1, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising); and

multicasting information (fig.2) to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate (pg.12, section 7.2).

ETSI fails to specifically disclose assigning at least one service rate to at least one of a plurality of subscription-based service types in response to at least one of channel conditions, power requirements, service subscription type, desired content, other services and equipment class of each subscriber and in further response to at least one of the determined geographical distribution and the determined subscription distribution, wherein the subscription-based service comprises at least a multicast service, the at least one service rate comprises at least one multicast rate, and said at least one of the plurality of subscription-based service types comprises at least a multicast service subscription type, and wherein the step of assigning comprises:

However, Paratainen teaches assigning at least one service rate ([0006] bit rate) to at least one of a plurality of subscription-based service types ([0032]) in response to at least one of channel conditions ([0032]), power requirements ([0012]), service subscription type ([0032]), desired content, other services ([0032]) and equipment class of each subscriber ([0007], [0014]) and in further response to at least one of the

determined geographical distribution and the determined subscription distribution (not show), wherein the subscription-based service ([0032]) comprises at least a multicast service (fig.7, [0037]), the at least one service rate ([0006] bit rate) comprises at least one multicast rate ([0032]), and said at least one of the plurality of subscription-based service types ([0032]) comprises at least a multicast service subscription type ([0032]), and wherein the step of assigning comprises:

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Paratainen to ETSI to reduce the mobile station power consumption.

ETSI and Paratainen fail to specifically disclose response to at least one of the determined geographical distribution and the determined subscription distribution.

However, Trossen teaches response to at least one of the determined geographical distribution ([0025]) and the determined subscription distribution ([0025]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Trossen to ETSI and Paratainen to provide a method for transmitting multicast over a wireless channel.

ETSI, Paratainen, and Trossen fail to specifically disclose prioritizing the assigning of the at least one multicast rate to support the multicasting information to at least one of a maximum number of multicast service subscribers, a maximum number of multicast service subscribers having the premium service type, and a maximum number of multicast service subscribers having the basic service type; and multicasting

information to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate.

However, Khan teaches prioritizing the assigning of the at least one multicast rate (fig.1) to support the multicasting information to at least one of a maximum number of multicast service subscribers (fig. 1 and 4, col.6, lines 39-49), a maximum number of multicast service subscribers having the premium service type (fig.1), and a maximum number of multicast service subscribers having the basic service type (fig.1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Khan to ETSI, Paratainen, and Trossen to efficiently transfer data information to and from mobile users and, in particular, to provide high data rate transfer capability..

Regarding claim 8, ETSI, Paratainen, Trossen, and Khan further teach the method of Claim 7, comprising:

scaling an availability of at least one of the multicast service subscription types (see Paratainen, [0032]) in response to a demand from the multicast service subscribers (see ETSI, fig.2, pg.8, section 4.2.1) associated with at least another multicast service subscription type (see fig.2, pg.2).

Regarding claim 9, ETSI, Paratainen, Trossen, and Khan further teach the method of claim 8, wherein the step of scaling comprises at least one of dropping (see ETSI, pg.8, section 4.2.1 to 4.3) and adding the availability of at least one of the multicast service subscription types (see ETSI, pg.8, section 4.2.1 to 4.3).

Regarding claim 10, ETSI, Paratainen, Trossen, and Khan further teach the method of claim 8, wherein the demand corresponds with at least one of power (see Paratainen, [0012]) and subscription revenue (see Paratainen, [0037]).

Regarding claim 11, ETSI, Paratainen, Trossen, and Khan further teach the method of claim 7, comprising:

scaling an availability of at least one of the multicast service subscription types in response to base station resources in use(see Paratainen, [0037]).

Regarding claim 12, ETSI, Paratainen, Trossen, and Khan further teach the method of claim 11, wherein the step of scaling comprises at least one of dropping (see ETSI, pg.8, section 4.2.1 to 4.3) and adding the availability of at least one of the multicast service subscription (see ETSI, pg.8, section 4.2.1 to 4.3).

Regarding claim 13, ETSI, Paratainen, Trossen, and Khan further teach the method of claim 11, wherein the equipment class corresponds with at least one supporting channelization code (see Paratainen, [0037]).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617

/Khai M Nguyen/
Examiner, Art Unit 2617

12/30/2008